Anglia Region Metastatic Liver Resection Service

Report of the External Review Panel Visit May 2013.

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Context

The Colorectal Improving Outcomes Guidance (IOG) states that the liver metastases surgical resection service must have a population base of at least 2 million, with all surgery taking place on the site of the trust hosting the Specialist MDT. A surgical resection service provides curative treatment for people with liver metastases. NHS England wishes to commission a service that increases access to this surgery for the population within the Anglia Cancer Network (ACN). A service treating a higher number of patients ensures that the team members develop and maintain skills and the team as a whole becomes an expert provider within a service that has other key clinical support on site. Together these elements support improved outcomes for this group of people.

Remit of External Review

The remit of the External Review Panels was to make an assessment of the submitted service proposals to provide a network wide service. Two submissions were received, one from Cambridge University Hospitals Foundation Trust (CUHFT) and one from Norfolk and Norwich Hospitals University Hospitals Foundation Trust (NNUH) both of whom expressed an interest in providing the network wide metastatic liver resection service (for External Team membership see Appendix 1 and for Terms of Reference see Appendix 2) .The purpose of this assessment was to advise whether each of the service proposals received could meet the service criteria (Appendix 3). In addition to this the review panel was asked to provide advice as to what the service would need to develop in order for it to fully meet the service criteria. The review panel was also required to advise which of the services were better placed to be the single network surgical centre detailing the reasons why.

Background

In 2011 the East of England Specialised Commissioning Group (SCG) reviewed each of the cancer networks in the east of England against the required IOG population. The Essex Cancer Network has a pathway to a single centre in London and the Mount Vernon Cancer Network (Hertfordshire and South Bedfordshire) a single pathway to the Royal Free in London. Both of these proposed centres are compliant with the 2 million population criteria and service configuration.

There are currently four referral pathways for the Anglia Cancer Network population, with 2 existing services within the Anglia Cancer Network (the Network) –NNUH and CUHFT. The Ipswich Hospital has recently stopped their liver resection surgery. The 2 centres used outside the network are Basingstoke for the Bedford referral pathway and Leicester for the Peterborough referral pathway. Initial analysis of current activity

suggests that the number of people undergoing liver resection for colorectal cancer metastases in the Anglia Network region is lower than the national average.

NHS England is responsible for commissioning this service and is only able to commission from an IOG compliant provider. The remit of this project is to oversee the identification and the implementation of a single specialist surgical centre for liver metastases within the Anglia Cancer Network to ensure compliance with the IOG. The identification of a single surgical site is the first phase of this project. Once a single site has been identified the project will move into the implementation phase.

In response to a clinical challenge raised by some clinicians involved in the current service provision concerning the appropriateness of the population based IOG model for the ACN, further advice was sought. The National Cancer Action Team agreed to conduct a review in November 2011. The review, with support from expert independent clinicians, was to explore the appropriateness of this model. The SCG received the review report from the National Cancer Action Team in August 2012.The report endorsed the proposed IOG reconfiguration of a single surgical centre serving the ACN.

The Need for Change

The IOG model draws on international evidence that services treating a higher number of patients ensures that individual team members develop and maintain skills and the team as a whole become an expert provider within a service that has other key specialties and clinical support services on site. Together these elements support improved outcomes for this group of people. Larger units are better able to measure outcomes and produce comparative data. Larger services are also better placed to offer a wide range of clinical trials and to support research to inform commissioning policy.

The impetus to have a single network and single surgical team is not only driven by the aim of improving surgical skills but also to increase better decision making based on consistent diagnostics, knowledge of the treatment options available and the associated outcomes. With a single critical mass, research and development becomes more possible.

There remains a wide variation in liver resection rates for patients with advanced (Stage 4) colorectal cancer. This is believed to be as a result of variable knowledge of the disease process among general and colorectal surgeons as well as amongst many oncologists with a general interest.

In addition when multiple sites are each seeing fewer patients, there is variation in imaging modalities used, inconsistent use of potentially down-staging chemotherapy and varying thresholds to determine which patients are considered for resection. Obvious geographical bias in referral patterns may also play a role in preventing access

to this life saving procedure.

The secondary liver resection rates of patients initially deemed unresectable ranges from 9% without central HPB input (CRYSTAL1, OPUS2), to nearly 40% (CELIM) when a high volume HPB team is intimately involved from the outset.

Reviewing all-comers with colorectal cancer metastases at a central high volume multi-disciplinary centre involving hepatopancreaticobiliary (HPB) surgeons, HPB oncologists and HPB radiologists should become the preferred pathway in the management of these patients.

It is widely accepted that increased volume leads directly to improved patient outcomes even if volume is a proxy for more intense levels of care such as availability of interventional radiology, intensive care units or specialised nursing units as it translates into better overall patient care.

Criteria Scoring Process

The Review Panel received the service proposals from CUHFT and NNUH, the Liver Metastases Service Criteria and scoring criteria three weeks before the scheduled visits (for visit itinerary see Appendix 4).

The Review Panel had a pre meeting before the visits to discuss their individual assessments of the proposals and put together a semi structured list of topics and issues that they wished to cover during the site meetings. At this meeting the service criteria were weighted and it was agreed that the scoring would be completed for both providers at a final panel meeting after the site meetings.

The Panel met with the team at NNUH in the morning (for attendees at this meeting see appendix 5). The meeting at NNUH was chaired by Mr. Mark Deakin.

The panel met with the team at CUHFT in the afternoon (for attendees at this meeting see appendix 6). The meeting at CUHFT was chaired by Professor Derek Manas.

The review panel would like to thank the teams at NNUH and CUHFT for their comprehensive service proposals, their participation in the meetings and their hospitality.

External Review Panel Findings against Service Criteria

Scoring of services was carried out at the end of the site visits. Scoring was as follows **2=Added Value, 4= Meets Criteria, 6= Risk, 8= Significant Risk** (lowest overall score = best fit with criteria).

NNUH

Where a score is 4 (meets criteria) no panel comment has been made. Where a score either added value or was seen as a risk a panel comment is recorded**.**

- Commissioner sign off was considered as a risk due to the fact that there was no explicit support for NNUH to provide a network wide service. Commissioner support is for the continuation of a local service.
- The fully costed implementation plan was considered as a risk due to the fact that the submitted plan is based on an increase in numbers for surgery. The panel could not identify a resource for service expansion in other departments.
- Clear stated responsibility for the patient was considered as a risk due to the fact that the plan was to continue as now. There was little evidence of how leadership of the proposed regional centre would be developed for the whole network.
- Diagnostics were considered as a risk due to the fact that the proposal did not adequately describe or analyse how the team would manage the additional workload of the whole network.
- Also it appeared that the Norwich team is a low user of liver MRI which is standard in most other centres and supports more accurate diagnosis and procedure planning.
- Surgical services were considered a risk as most resections were being performed by one surgeon and that cover required input from a surgeon operating infrequently at NNUH.
- Oncology Services were considered a risk due to the fact that there was poor evidence to suggest that there was robust oncology communication with other DGH's. The panel were concerned that the team wouldn't cope with the excess demand for a full networked service
- Research was considered a risk due to the fact that no patients had been entered for the two main studies available at present. This indicated that the service lacked the foundations for a research programme which would be expected of any such centre.

(for full NNUH scoring sheet see Appendix 7)

CUHFT

Where a score is 4 (meets criteria) no panel comment has been made. Where a score either added value or was seen as a risk a panel comment is recorded**.**

- Clear stated responsibility for the patient was considered as a risk due to the fact that the plan was to continue as now. There was little evidence that the team had thought through the leadership of the provision of a regional centre.
- The Operational Model in general provided a good description of a networked model but was found to be a risk due to the fact that the review team found evidence of a lack of emphasis in encouraging communication between the centre and the referring local MDTs

- The statement made by the provider concerning the future impact on services should the colorectal liver metastatic service be removed clearly demonstrated that co-located services would suffer if surgery for colorectal liver metastases were removed.
- The Liver Resection Specialist MDT was felt to be enhanced by co-location of the metastatic liver resection service with the primary liver resection and liver transplant service as this leads to a depth and breadth of skills and services that would ensure a fully comprehensive service.
- The review team concluded that the surgical service would also be enhanced with the co-location of the metastatic liver resection service with the primary liver resection and liver transplant service as this leads to a depth and breadth of skills and services that would ensure a fully comprehensive service.
- The Operational Policy submitted was found by the panel to be comprehensive and the clear documented processes added value to the MDT working.

(for full CUHFT scoring sheet see Appendix 8).

External Review Panel Recommendations

The external review panel considered a range of additional evidence submitted to the panel on the day of the site meetings.

Evidence submitted by NNUH suggested that resection rates at CUHFT and associated unit MDTs were lower than those at or covered by NNUH (see Appendix 9). This evidence was considered by the panel and following discussion it was agreed that the referral and resection rates would change and could be properly audited once there was a single network and a centralised team for the service, which made clear the roles and responsibilities of all relevant MDTs within the network.

Additional evidence submitted by CUHFT demonstrated that resection rates were significantly higher than data supplied to the panel. Their own data suggested a

resection rate of 4.7% which would be in keeping with most HPB centres nationally. In addition CUHFT presented evidence of resections post down-staging. This was significantly higher than that suggested by the NNUH service. The argument put forward by CUHFT related to their ability to deal with more complex cases because of the multi-disciplinary approach they have in dealing with the generality of their HPB service - especially in dealing with complex hilar cholangiocarcinomas and HCC. The Panel accepted these were valid points in relation to the outcomes for CUHT

Both services demonstrated comparable resection rates and outcomes for their current populations.

The added risks of the two services are noted above. The panel concluded that the identified risks at NNUH were greater than those at CUHFT.

The panel was in no doubt that the NNUH service is a good service and that as a small service it meets the needs of the local population. The panel found that whilst the service had considered up scaling and an increase in numbers there had been no real consideration of the service expansion required in communication, and organisation, of oncology, radiology and other associated departments that would be required when providing a whole network wide service.

The panel did consider a model of CUHFT as the HPB site with a separate metastatic centre at NNUH, but felt there were significant advantages of co-location with other HPB services. Also such a configuration is in keeping with both the national direction for liver and cancer services.

Whist the panel found that CUHFT was best placed to deliver the network wide service a number of risks and recommended actions were identified. The panel strongly recommends that these are considered fully by commissioners and included in the service implementation action plan.

The risks and recommended actions are:

The consideration of transport needs of a rural and elderly population especially from the more remote areas of the region. The panel did not underestimate the challenges of distance and limited transport infrastructure. It is recognised that this is an issue across a number of services, and across the whole region. The Commissioner recommends that the provider works with CCG's and the Local Authority to explore innovative ways to address this.

Leadership of the network wide service needs review, and needs to include ensuring that sufficient time is given to this role. The team felt that it may be helpful to separate

the leadership of the liver MDT and pancreatic MDT. A suggestion is that as it is hoped that further patients will be down-staged that this service might be best oncology led.

Ensuring engagement of all referring units is key to this service and it is recommended that a plan for CUHFT members to be present at referring MDTs on a defined number of occasions would help with initiating and sustaining this engagement.

A whole team approach to proactive working from the centre will ensure close team working with each of the referring MDTs - this requires input from oncology, radiology and surgery and will require clinician time, video-conferencing and administrative support.

Proactive working from the centre to ensure improved referral from the referring Colorectal MDTs and a demonstrable improvement in resection rates

Ensuring at all times that the new model of working whilst centralising surgery should at the same time maximize those parts of the care pathway that can be delivered locally.

Summary

In summary the external review panel considers that the single site surgical liver metastasis service for the Anglia Cancer Network population should be developed at CUHFT. Whilst the panel found that CUHFT was best placed to deliver the network wide service a number of risks and recommended actions were identified. The panel strongly recommends that these are considered fully by commissioners and included in the service implementation action plan.

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